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## **A SYSTEM AND METHOD FOR ELECTROSLAG WELDING AN EXPANSION JOINT RAIL**

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### **CROSS REFERENCES TO RELATED APPLICATIONS**

This patent application is related to patent application 09/804,686 which was filed on March 12, 2001 and is titled "Modular Welding System and Method", which is related to 15 issued patent U.S. Patent No. 6,297,472 that was issued on October 2, 2001 and is titled "Welding System and Method".

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### **BACKGROUND OF THE INVENTION**

#### **1. Field of Invention**

25 The invention is related to welding. More particularly, the invention is related to a system and method for electroslag welding.

#### **2. Description of Related Art**

A typical highway and/or bridge includes a plurality of concrete sections that are 30 spaced apart from one another to accommodate thermal expansion and contraction due to temperature changes. An expansion joint is inserted between the concrete sections to form a bridge between the concrete sections, thereby minimizing the irregularities on the surface of a